

### **Remarks**

In response to the Office Action mailed on August 08, 2006 regarding the above-referenced application, the Applicant respectfully requests to amend the application in the manner identified below. Furthermore, the Applicant respectfully requests that the patent be granted in view of the arguments presented. No new matter has been added by this amendment.

### **Present Status of Application**

Claims 9-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Yamaguchi, et. al. (US 2003/0038367).

Claims 9-11 and 20-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Ulrich, et. al. (US 6,864,589).

Claims 9-11 and 20-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Rumsey, et. al. (US 6,668,449).

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ulrich, et. al. (US 6,864,589) in view of Liu, et. al. (US 6,251,694).

Applicant respectfully requests that claims 9-11 and 14 be cancelled, claim 20 be amended, and new claim 23 is added. Support for the amendment of claim 20 can be found between Page 2, Line 27 and Page 3, Line 2 of the specification.

### **Rejections Under 35 U.S.C. 102(e) by Yamaguchi**

Claims 9-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Yamaguchi, et. al. (US 2003/0038367).

In response, Applicant cancels claims 9-10. Thus, the rejection should be withdrawn.

### **Rejections Under 35 U.S.C. 102(e) by Ulrich**

Claims 9-11 and 20-22 are rejected under U.S.C. 102(e) as being anticipated by Ulrich, et. al. (US 6,864,589). Applicant asserts that amended claim 20 and dependent claims 21 and 22 are patentable for reasons discussed below.

**Amended Claim 20 Recites:**

20. A probe pad on a semiconductor circuit for electric characteristic measurement, wherein *the probe pad electrically connects the semiconductor circuit for electric characteristic measurement*, and an entirety of the probe pad has a mark-shape contour to indicate the relative location of the probe pad on the semiconductor circuit.

It is clear that the probe pad on a semiconductor circuit for electric characteristic measurement of amended claim 20 comprises *the probe pad electrically connecting the semiconductor circuit for electric characteristic measurement*, and an entirety of the probe pad having a mark-shape contour to indicate the relative location of the probe pad on the semiconductor circuit.

In page 3 of the Office Action, the Examiner asserts that “Regarding claims 9, 20, Ulrich discloses a probe pad 55, 56, 58, and 60 on a semiconductor circuit 50 for electric characteristic measurement...”.

As disclosed by Ulrich in Col. 3, Lines 20-33, and FIG. 2:

In addition, x-axis measurement guides 53 (indicated by a dotted line) and y-axis measurement guides 54 (indicated by a dotted line) may be added adjacent the first array of shapes 52. Each set of either x-axis measurement guides 53, or y-axis measurement guides 53 comprise a set of *centerline marks 55*, a set of *negative direction marks 56*, a set of *positive direction marks 58*, and *miscellaneous alignment marks 60, which may be used to indicate acceptable ranges of misalignment*. The various alignment marks are preferable, but are not necessary to the formation or use of the vernier. The first array of shapes 52 is

shown as small squares. They may be any desired shapes but squares or circles are preferable.

Ulrich discloses centerline marks 55, negative direction marks 56, positive direction marks 58, and miscellaneous alignment marks 60 used to indicate acceptable ranges of misalignment. The alignment mark 55, 56, 58 and 60 are only used for alignment, but not electrically connecting the semiconductor circuit for electric characteristic measurement. Accordingly, Ulrich neither discloses nor suggests '*the probe pad electrically connects the semiconductor circuit for electric characteristic measurement*, and an entirety of the probe pad has a mark-shape contour to indicate the relative location of the probe pad on the semiconductor circuit' in amended claim 20. Consequently, applicant respectfully submits that the cited reference fails to disclose the feature discussed above in the present invention as set forth in amended claim 20. Reconsideration of this rejection is hereby respectfully requested.

Hence, it is believed that the amended claim 20 is allowable over the cited references. Insofar as claims 21 and 22 depend from amended claim 20, it is the Applicant's belief that these claims are also allowable by virtue of their dependency.

#### **Rejections Under 35 U.S.C. 102(e) by Rumsey**

Claims 9-11, 20-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Rumsey, et. al. (US 6,668,449).

In page 4 of the Office Action, the Examiner asserts that "Regarding claims 9, 20, Rumsey discloses a probe pad 54 on a semiconductor circuit 52 for electric characteristic measurement... the shape of the mark 54 is contour".

As disclosed by Rumsey in Col. 9, Lines 1-7:

Preferably, *pin one indicator/alignment fiducial 54* comprises an "L"-shaped and narrow opening in the solder mask layer 80 in which two lines, substantially

mutually perpendicular to one another, form components of an X-Y axis. The “L” shape of pin one indicator/alignment fiducial 54 can be inverted and/or spatially rotated to serve the purposes of the present invention.

It is clear that Rumsey only discloses “L” shape pin one indicator/alignment fiducial 54 for purposes of alignment. The alignment mark 54 is used for alignment, but not electrically connecting the semiconductor circuit for electric characteristic measurement. Accordingly, Rumsey neither discloses, nor suggests “*the probe pad electrically connects the semiconductor circuit for electric characteristic measurement*,” and an entirety of the probe pad has a mark-shape contour to indicate the relative location of the probe pad on the semiconductor circuit” in amended claim 20. Consequently, applicant respectfully submits that the cited reference fails to disclose the feature discussed above in the present invention as set forth in amended claim 20. Reconsideration of this rejection is hereby respectfully requested.

Hence, it is believed that the amended claim 20 is allowable over the cited references. Insofar as claims 21 and 22 depend from amended claim 20, it is the Applicant’s belief that these claims are also allowable at least by virtue of their dependency.

#### **Rejections Under 35 U.S.C. 103(a)**

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ulrich, et. al. (US 6,864,589) in view of Liu, et. al. (US 6,251,694).

In response, Applicant cancels claim 14. Thus, the rejection should be withdrawn.

#### **Conclusion**

This response is believed to be responsive to all points raised in the Office Action. Accordingly, Applicant respectfully requests reconsideration and allowance of all of the

U.S. Patent Application Serial No. 10/776,714  
Reply to Office Action dated August 8, 2006


currently pending claims. Should the Examiner have any remaining questions or concerns, the Examiner is urged to contact the undersigned attorney at 612.336.4611 to discuss the same.

Respectfully submitted,



MERCHANT & GOULD P.C.  
P.O. Box 2903  
Minneapolis, Minnesota 55402-0903  
(612) 332-5300

Dated: November 8, 2006

By   
Tong Wu  
Reg. No. 43,361  
TW:SA:cjc